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# INTERIM REPORT

OF THE

Medical Officer of Health

for 1947





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ST. MARYCHURCH TOWN HALL,  
TORQUAY.

*To the Worshipful the Mayor and to the Aldermen and Councillors  
of the Borough of Torquay.*

MR. MAYOR, MRS. COUNCILLOR WHITE, AND GENTLEMEN,

I have the honour to submit an Interim Annual Report for the year 1947, in accordance with the instructions of the Minister of Health : as in the war years, some of the customary detailed information is omitted from the various sections.

The year was marked by a widespread outbreak of poliomyelitis (infantile paralysis) affecting the whole country, and reaching the highest incidence since the disease became notifiable in 1911. In Torquay the notifications were fewer than was expected, and this in spite of a large population at risk ; for the town was exceptionally filled with visitors in the early months of the outbreak.

For the first time on record there has not been a single case of diphtheria during the whole of a year : and while there are no grounds for complacency until the disease is completely eliminated, this is a very encouraging and gratifying reflexion on the diphtheria immunisation scheme—the more so because 1947 is the last calendar year for which you are responsible for this work.

Although some useful and gradual progress is recorded, the problem of housing still remains acute : and until further and more ample provision is possible, the present position with its concomitant overcrowding must remain a source of anxiety. It is to be hoped that those families who are re-housed will quickly acquire and resolutely maintain a much higher standard of home management, without which the real benefits of these extensive schemes will never be achieved.

The routine duties of every section of the Department have been carried out with quiet efficiency ; although it is quite impossible, within the compass of a short report, to give a vivid and complete picture of all the wide range of work—much of which is unseen and cannot easily be turned into readable popular news.



In conclusion, it is with appreciation that I acknowledge both the encouraging support given to me by the Chairman and members of the Public Health Committee, and also the co-operation and helpfulness of the medical profession in the many contacts of the daily routine.

To all the Staff is due the greatest credit, for their loyal support and hard work deserve unbounded admiration. The time is now at hand for the various sections to divide and to serve under different Authorities: but much more satisfying than the acknowledgement which is obviously their due, the Staff can confidently feel that their record of zeal and efficiency have contributed substantially to the gains of preventive medicine already won, and augur well for the victories that are yet to come.

I have the honour to be,

Your obedient Servant,

J. V. A. SIMPSON.

## STAFF

### (a) Medical

*Medical Officer of Health, Medical Superintendent of Isolation Hospital, and Chief Billeting Officer*

J. V. A. SIMPSON,

M.D.LOND., B.S., M.R.C.S., L.R.C.P., D.P.H.CAMB.

*Acting Deputy Medical Officer of Health and Assistant County Medical Officer*

T. GIBSON, M.D.ED., C.M., D.P.H.LOND.

*Medical Officer, Ante-Natal Clinic and Post-Natal Clinic*

\*P. A. McCALLUM, M.B.GLASG., CH.B., D.P.H.CAMB.

*Obstetric Consultants*

\*P. A. McCALLUM, M.B.GLASG., CH.B., D.P.H.CAMB.

\*B. VENN DUNN, M.D.ED., F.R.C.S.ED.

*Aural Surgeon (Maternity and Child Welfare, and Isolation Hospital)*

\*W. H. BRADBEER, M.S.LOND., D.L.O.ENG.

*Pathologist and Bacteriologist*

\*G. A. C. LYNCH, M.D., D.P.H.LIVERP.

### (b) Dental

*Dental Officer for Maternity and Child Welfare*

N. HARRIS, L.D.S., R.C.S.ENG.

### (c) Nursing

*Health Visitors, Child Protection Visitors*

†Miss G. JONES, S.R.N., S.C.M., H.V.CERT.R.S.I.

†Miss J. M. WALLACE, S.R.N., S.C.M., H.V.CERT.R.S.I.

†Mrs. L. LEE, S.R.N., S.C.M., H.V.CERT.R.S.I.

*Sister-in-charge, Isolation Hospital :*

Miss B. BRADY, S.R.N., R.F.N.

*Matron, Borough Maternity Home*

Miss A. C. BOWDEN, S.R.N., S.C.M.

### (d) Sanitary

*Senior Sanitary Inspector, and Billeting Officer*

G. J. LOVELESS, C.R.S.I., Cert. Insp. Meat and Food R.S.I.

*District Sanitary Inspectors, and Billeting Officers*

A. THOMPSON, C.R.S.I.

J. F. H. SMITH, C.R.S.I., Cert. Insp. Meat and Food, R.S.I., Dip. R.I.P.H.H.,  
Cert. Lab. Technique, Exeter.

P. H. BURGE, C.S.I.B., Cert. Insp. Meat and Food R.S.I., Cert. San. Sc.  
R.S.I., Cert. Inst. San. Engineers, Cert. Trop. Hyg.

E. V. ROBERTS, C.R.S.I., Cert. Insp. Meat and Food R.S.I.

## (e) Other

*Public Analyst*

\*T. TICKLE, B.SC., F.I.C.

*Chief Clerk*

W. H. NICKELS.

*Clerks :**(Maternity and Child Welfare)*

W. D. WHITE.

Miss K. HUDSON.

Miss I. M. WILTSHIRE.

§Miss A. M. MOXHAY.

Miss L. M. HARRIS.

\*§Miss J. E. WHITE.

*(Sanitary Inspector)*

§F. J. PAYNE.

*Assistants to Sanitary Inspectors*

E. D. TUCKER.

§M. L. WHITE.

*Senior Ambulance Attendant*

J. R. WICKINS.

*Rodent Operatives :*

§T. SCOURFIELD.

§J. BULL.

§G. EVANS.

§C. CHASE.

*Ambulance Attendants :*

F. BACKWELL.

G. HARE.

§L. SOPER.

§R. E. C. JAMES.

§H. DAGG.

\* Part Time.

† Also School Nurse.

§ Temporary.



## SECTION A.

# STATISTICS AND SOCIAL CONDITIONS OF THE AREA

|  |          |
|--|----------|
| Area (in acres) .. .. .  | 6,244    |
| Registrar-General's estimate of resident population, mid-1947 .. .. .    | 49,880   |
| Number of inhabited houses (end of 1947) according to Rate Books .. .. . | 13,773   |
| Rateable value (end of 1947) .. .. .                                     | £546,010 |
| Sum represented by a Penny Rate (end of 1947) ..                         | £2,165   |

## SOCIAL CONDITIONS,

*Including the chief Industries carried on in the Area and the extent of Unemployment.*

There is nothing exceptional to record about the social conditions ; but the following figures, kindly supplied by the Manager of the Ministry of Labour Employment Exchange, show the extent of unemployment.

|               | Men. | Women. | Boys. | Girls. | Total. |
|---------------|------|--------|-------|--------|--------|
| January, 1947 | 333  | 86     | 9     | 1      | 429    |
| July, 1947 .. | 71   | 28     | 2     | 3      | 104    |
| January, 1948 | 344  | 123    | 7     | 19     | 493    |

## EXTRACTS FROM VITAL STATISTICS OF THE YEAR 1947,

*which relate to the net Births and Deaths after correction for inward and outward transfers as furnished by the Registrar-General.*

|   |       |
|---|-------|
| Birth-rate per 1,000 of the estimated population ....         | 17.28 |
| Still birth-rate per 1,000 total (live and still) births .... | 24.89 |
| Death-rate per 1,000 of the estimated population ....         | 16.52 |

Deaths from puerperal causes (Headings 29 and 30 of the Registrar-General's Short List) :—

|                                   | Rate per 1,000 total<br>(live and still) births |
|-----------------------------------|---|
| No. 29 Puerperal sepsis ....      | 0.00  |
| No. 30 Other maternal causes .... | 2.26  |
| Total ....                        | 2.26  |

Death-rate of infants under one year of age :—

|  |      |
|--|------|
| All infants per 1,000 live births ....                       | 26.7 |
| Legitimate infants per 1,000 legitimate live births ....     | 27.7 |
| Illegitimate infants per 1,000 illegitimate live births .... | 14.5 |

|   |     |
|---|-----|
| Deaths from Cancer (all ages) ....        | 135 |
| „ Measles (all ages) ....                 | 1   |
| „ Whooping Cough (all ages) ....          | 0   |
| „ Diarrhoea (under two years of age) .... | 0   |

*Particulars of any unusual or excessive mortality during the year which has received or required special comment.*

During the year there has been nothing to report.

### *Population.*

The Registrar-General's estimate for the resident population at the middle of 1947 is 49,880 ; and this figure is used in calculating the marriage-rate, birth-rate, death-rate and other statistical returns. The population at the last census in 1931 was 46,352.

### *Births.*

The number of live births registered during the year, corrected for transfers, is 862, of which 452 were male and 410 female ; there were 793 legitimate and 69 illegitimate births. There were 22 still-births, 21 legitimate and 1 illegitimate.

The birth-rate was 17.3 per 1,000 population, compared with 20.5 for England and Wales, and 22.2 for the smaller towns ; the stillbirth-rate was 0.44 per 1,000 population, the corresponding rates for England and Wales and for the smaller towns being 0.50 and 0.54. The stillbirth-rate per 1,000 live and stillbirths was 24.89.

(The smaller towns comprise 148 towns, with a resident population between 25,000 and 50,000 at the 1931 census, and include Torquay.)

The proportion of illegitimate to total births in Torquay (after correction for transfers) was 7.9 per cent in 1947 ; this figure had risen progressively from 6.4 per cent in 1939 to a maximum of 17.7 per cent in 1945, subsequently falling to 11.3 in 1946.

The total number of births registered is the highest recorded in Torquay, the previous highest being 1946 ; and the births again exceeded the deaths, for the second successive time in many years. The birth-rate had risen from a minimum of 8.9 in 1941 to the high figure of 17.3 in 1947. It had only been higher on one occasion during this century—in 1925 when it was 18.6.

The number of births depends upon the number of women of child-bearing age (i.e. between 15 and 44 years) in the population, and in the 1931 census there were only 5,173 married women between these ages ; and whether the high rate is due to a biological increase after the war, or to an increase by immigration of the number of younger persons is not certain. Probably both factors are involved, and there are signs now that the high rate is not being maintained. When the up-to-date age-distribution of the resident population is available, it will probably then be seen that modern Torquay is beginning to change somewhat from its former self with the predominance of retired residents.



### *Marriages.*

The marriage-rate was 5.9 per 1,000 population compared with 6.0 in 1946, 7.1 in 1945, 5.7 in 1944, 5.5 in 1943, and 5.8 in 1942.

### *Deaths.*

The number of deaths registered during the year, corrected for transfers, is 824, of which 368 were males and 456 were females.

The crude death-rate was 16.5 per 1,000 population compared with 15.4 in 1946 ; the death-rate in 1947 for England and Wales was 12.0, and for the smaller towns 11.9.

In normal times, in order to make adjustments for the age and sex distribution of Torquay, the Registrar-General supplies an "areal comparability factor" with which to multiply the crude death-rate and so obtain an adjusted death-rate. This year, however, the Registrar-General again states : "The variety and magnitude of local population movements and the uneven incidence of civilian war deaths have together combined to frustrate the attempt to secure comparability between local death-rates by the use of Areal Comparability Factors, and the preparation and issue of such factors are being suspended under present conditions."

The chief causes of death were as usual for Torquay : (1) Heart disease 273 ; (2) Cancer 135 ; and (3) Intra-cranial vascular lesions 116 ; which between them are responsible for nearly two-thirds of the total deaths.

The causes of death are given in the accompanying tables supplied by the Registrar-General.

### *Infant Mortality.*

The infant mortality rate was 26.7 per 1,000 total live births, compared with a rate of 41 for England and Wales and 36 for the smaller towns ; the death-rate for legitimate infants per 1,000 legitimate births was 27.7, and the death-rate of illegitimate infants per 1,000 illegitimate births was 14.5. The infant mortality rate in Torquay tends to fluctuate owing to the comparatively small numbers upon which it is calculated : thus the figures for the preceding five years, 1942-46 inclusive, were 28, 48, 42, 36, 30, with an average of 37.0.

There were 2 maternal deaths during the year, the maternal mortality rate being 2.26 per 1,000 total births : this mortality rate also fluctuates considerably on account of the small numbers, and for the five years 1942-46 was 3.32, 1.66, 2.61, 0.00, 2.43, with an average of 2.00 per 1,000 total births. The rate for England and Wales in 1947 was 1.17, and in 1946 it was 1.43.

| CAUSES OF DEATH IN 1947                    |  |                            |      |      |      | Males | Females |
|--|--|----------------------------|------|------|------|-------|---------|
| All Causes ....                            |  |                            |      |      |      | 368   | 456     |
| 1.   | Typhoid and Paratyphoid Fevers                               | ....                       | .... | .... | .... | —     | —       |
| 2.   | Cerebro-spinal Fever   | ....                       | .... | .... | .... | —     | —       |
| 3.   | Scarlet Fever  | ....                       | .... | .... | .... | —     | —       |
| 4.   | Whooping Cough   | ....                       | .... | .... | .... | —     | —       |
| 5.   | Diphtheria   | ....                       | .... | .... | .... | —     | —       |
| 6.   | Tuberculosis of Respiratory System                           | ....                       | .... | .... | .... | 10    | 9       |
| 7.   | Other forms of Tuberculosis                                  | ....                       | .... | .... | .... | 2     | 1       |
| 8.   | Syphilitic Diseases  | ....                       | .... | .... | .... | 2     | —       |
| 9.   | Influenza  | ....                       | .... | .... | .... | —     | —       |
| 10.  | Measles  | ....                       | .... | .... | .... | —     | 1       |
| 11.  | Acute Poliomyelitis and Polioencephalitis                    | ....                       | .... | .... | .... | —     | —       |
| 12.  | Acute Infectious Encephalitis                                | ....                       | .... | .... | .... | —     | 1       |
| 13.  | { Cancer of Buccal Cavity and<br>Oesophagus (Males only)     | ....                       | .... | .... | .... | 5     | —       |
|  |  | Cancer of Uterus (Females) | .... | .... | .... | —     | 7       |
| 14.  | Cancer of Stomach and Duodenum                               | ....                       | .... | .... | .... | 12    | 14      |
| 15.  | Cancer of Breast   | ....                       | .... | .... | .... | —     | 15      |
| 16.  | Cancer of all other sites                                    | ....                       | .... | .... | .... | 38    | 44      |
| 17.  | Diabetes   | ....                       | .... | .... | .... | 3     | 5       |
| 18.  | Intra-cranial Vascular lesions                               | ....                       | .... | .... | .... | 43    | 73      |
| 19.  | Heart Disease  | ....                       | .... | .... | .... | 123   | 150     |
| 20.  | Other Diseases of the Circulatory System                     | ....                       | .... | .... | .... | 12    | 17      |
| 21.  | Bronchitis   | ....                       | .... | .... | .... | 16    | 17      |
| 22.  | Pneumonia  | ....                       | .... | .... | .... | 14    | 14      |
| 23.  | Other Respiratory Diseases                                   | ....                       | .... | .... | .... | 4     | 6       |
| 24.  | Ulceration of the Stomach or Duodenum                        | ....                       | .... | .... | .... | 3     | 4       |
| 25.  | Diarrhoea (under 2 years)                                    | ....                       | .... | .... | .... | —     | —       |
| 26.  | Appendicitis   | ....                       | .... | .... | .... | 3     | 1       |
| 27.  | Other Digestive Diseases                                     | ....                       | .... | .... | .... | 11    | 11      |
| 28.  | Nephritis  | ....                       | .... | .... | .... | 11    | 10      |
| 29.  | Puerperal and Post-abortion Sepsis                           | ....                       | .... | .... | .... | —     | —       |
| 30.  | Other Maternal causes  | ....                       | .... | .... | .... | —     | 2       |
| 31.  | Premature Birth  | ....                       | .... | .... | .... | 1     | 1       |
| 32.  | Congenital Malformations, Birth Injury,<br>Infantile Disease | ....                       | .... | .... | .... | 8     | 7       |
| 33.  | Suicide  | ....                       | .... | .... | .... | 4     | 2       |
| 34.  | Road Traffic Accidents                                       | ....                       | .... | .... | .... | 3     | —       |
| 35.  | Other Violent Causes   | ....                       | .... | .... | .... | 9     | 7       |
| 36.  | All other Causes   | ....                       | .... | .... | .... | 31    | 37      |
| Death of Infants under 1 year { Total .... |  |                            |      |      |      | 11    | 12      |
| { Legitimate ....                          |  |                            |      |      |      | 11    | 11      |
| { Illegitimate ....                        |  |                            |      |      |      | —     | 1       |
| Stillbirths { Total ....                   |  |                            |      |      |      | 12    | 10      |
| { Legitimate ....                          |  |                            |      |      |      | 12    | 9       |
| { Illegitimate ....                        |  |                            |      |      |      | —     | 1       |



## SECTION B.

**GENERAL PROVISION OF HEALTH SERVICES FOR  
THE AREA**

1. (i) *Full particulars of the Public Health Officers of the Authority, including their duties, are incorporated in the beginning of the Report.*

At the end of March Miss M. J. Stewart retired from the post of Matron at the Isolation Hospital, where she had given excellent service since 1930 ; and owing to the coming changes and probable co-ordination of the Hospitals in the district, Miss B. Brady was promoted to be Sister-in-Charge from 1st April.

Miss A. Sheerin was appointed a Health Visitor and School Nurse from 1st March to fill the vacancy caused by the resignation of Miss M. P. Mullender who had left at the end of 1946 ; subsequently Miss Sheerin married and, as Mrs. Ralls, left in October to go to a post in Wiltshire. It was not possible to fill the vacancy before the end of the year.

Mr. P. H. Burge of Kettering who was appointed to fill a vacancy of District Sanitary Inspector in December 1946 took up his duties on 1st February.

Mr. H. T. Beechey, District Sanitary Inspector, resigned at the end of May to take up the post of Sanitary Inspector in Nairobi : and Mr. E. V. Roberts of Worthing was appointed to fill the vacancy, taking up his duties on 14th July.

(ii) (a) *Laboratory Facilities.*

There have been no changes during the year ; but the County Council Laboratory at Exeter, to which some of the work is sent, was taken over by the Medical Research Council and became part of the general Public Health Laboratory Service administered by that body for the Ministry of Health.

(b) *Ambulance Service.*

There have been no changes in this Service during the year ; but as the present premises are only temporary, efforts were made to find another more suitable station, and it was ultimately agreed to use part of the buildings behind the Town Hall at Castle Circus. Unfortunately little progress was made in this, owing to various difficulties, not least among them being the undecided policy of the future of this Service after it leaves the Corporation of Torquay.



Subsequently the opportunity presented itself of using the premises vacated by the National Fire Service at Chelston, and this was agreed to early in 1948. These premises are the property of the Corporation and provide a duty room, with washbasin and lavatory accommodation, and garage accommodation for the four ambulances: some minor improvements and re-decoration were being carried out and the service was to be transferred there as soon as possible.

Even these premises are only temporary, but the future development of this Service will be the duty of the County Council. And it is perhaps not too late yet to hope that ambulances will one day ultimately be based on Hospitals, to and from which most of their work will radiate.

(c) *Nursing in the Home.*

(d) *Treatment Centres and Clinics.*

(e) *Hospitals: Public and Voluntary.*

There have been no changes during the year.

### 3. *Midwifery and Maternity Services.*

(i) *Midwives Act, 1936.*

The work under the Midwives Act has proceeded satisfactorily and without incident; 28 midwives notified their intention to practise. The Scheme by which the Queen's Institute carry out the domiciliary midwifery of the Borough has continued to operate well; during the year there were 268 domiciliary confinements.

(ii) *Maternity Services.*

The arrangements at the Torbay Hospital remain unchanged, with 2 ante-natal and 9 lying-in beds.

The Borough Maternity Home has functioned in an admirable way throughout the year with steady highly efficient work, which has been greatly appreciated by the 224 mothers who were patients there. The midwifery staff are trained in gas-air analgesia which is thus available for all cases.

The mothers attend the ante-natal clinic at the Torbay Hospital, where the selection is made of difficult or complicated cases for hospital, and normal cases, without suitable home conditions, for the maternity home; and the obstetric consultants are available if the midwives require medical assistance for any case in the Home.

During the year there were 1,077 births notified, and the confinements took place as follows :

|   | <i>Residents.</i> | <i>Non-Residents.</i> | <i>Total.</i> |
|---|-------------------|-----------------------|---------------|
| Borough Maternity Home ....                           | 224               | —                     | 224           |
| Torbay Hospital Maternity Ward ....                   | 124               | 133                   | 257           |
| Morningside Unit ....                                 | —                 | 16                    | 16            |
| County Maternity Homes ....                           | 3                 | —                     | 3             |
| Torbay Hospital Private Wards ....                    | 19                | 14                    | 33            |
| Private Nursing Homes ....                            | 206               | 70                    | 276           |
| At home by Queen's Institute of District Nursing .... | 268               | —                     | 268           |
|   | 844               | 233                   | 1077          |

The combined war-time scheme of the Hazelwood-Morningside Unit, described in previous reports, was discontinued at the end of January. Under this arrangement, which had been in operation for some years, ex-Service girls had been sent by the Ministry of Health and others cases were sent by the Children's Aid Society : all the maternity work was carried out at Morningside, while Hazelwood was the ante-natal and post-natal hostel. Although a scheme of this nature was liable to be beset with endless difficulties requiring all the patience and perseverance which human nature could give, the Unit had functioned in a very capable and praiseworthy way with an excellent record of unremitting hard service. And the greatest credit is due to every member of the staff for their careful work, for their quiet efficiency, and for their continuance in well-doing throughout a most arduous and exacting time.

The premises at Hazelwood were cleared by the end of February, the furniture and equipment belonging to the Ministry of Health was disposed of in accordance with Circular 208/45 : the Morningside section which had been evacuated in 1941 was cleared in June when the staff and furniture belonging to the Children's Aid Society returned to London.

(iii) *Sheets for Expectant Mothers.*

In connexion with Circular 154/44, the issue was continued of priority dockets for sheets for expectant mothers. It was felt that shortage of sheets had sometimes been an inducement to women to seek institutional confinement and that midwives were hampered by lack of this necessary provision. Women holding R.B.2 expectant mother's ration books are eligible to purchase utility sheets on priority dockets if the midwife booked for the domiciliary confinement certifies that the mother is genuinely in need of additional sheets. The issue is normally two sheets, but not more than three can be allowed in any case.



Quarterly returns are made to the Priority Officer showing how the dockets have been issued, and during the year 94 mothers received dockets for 190 sheets.

(iv) *Care of Premature Infants.*

The arrangements previously detailed are unchanged. During the year the number of babies notified who weighed  $5\frac{1}{2}$  lb. or less was 49, and of these 41 were born in hospital and 8 at home. The number of those born at home who were nursed entirely at home were 8, none of whom died during the first 24 hours or during the first month; of those born in hospital, 1 died during the first 24 hours and 10 more during the first month.

(v) *The Care of Illegitimate Children.*

The scheme for the care of illegitimate children has continued to operate satisfactorily. Although the rate of illegitimacy rose rapidly and was maintained at a very high level during the years of the emergency, there has been a welcome reduction recently; and this, if continued, will make the solution easier of the many problems involved. The cases referred to the social worker numbered 57.

(vi) *Home Help and Domestic Help Service.*

Following the somewhat limited start in the previous year to place this scheme on a whole-time basis, more encouraging progress has been made: and at the end of the year there were four whole-time Home Helps working under the Organiser. Their work is invaluable in, and very greatly appreciated by, every case which it has been possible to assist; and it is to be hoped that this service will expand, surely if slowly, to become a much larger organisation. The difficulties of staffing this work in any area are considerable, and in a health resort they are much greater; but the need here which is increasing, is even more urgent. And, after all, difficulties are there so as to be overcome by resolute patience and effort.

(vii) *Health Visitors and Infant Welfare Centres.*

The Health Visitors have continued to carry out a large amount of most creditable work, their duties in each district being combined with the school medical service. Shortage of staff and the increasing distances they have to cover, with the new housing estates becoming occupied, have added to their difficulties; but it is hoped that these will be resolved under the new scheme.

Particular attention has continued to be given to diphtheria immunisation, and to the continued problems of illegitimacy and adoption of children. They also assisted in the enquiry into the social and economic problems of childbearing undertaken by the Population Investigation Committee of the Royal College of Obstetricians and Gynaecologists.

The visits to mothers and children during the year numbered: under 1 year, 3,502; and 1-5 years, 3,070.

(viii) *Verminous Conditions and Uncleanliness.*

The measures described in previous reports following Circular 2831 have been diligently continued; and there is nothing to comment upon except to emphasise once again the close connexion between this problem and unsatisfactory careless homes.

(ix) *Child Life Protection.*

There is nothing exceptional to report.

(x) *Adoption of Children (Regulation) Act, 1939.*

The supervision by the Child Protection Visitors of these cases has continued, and during the year the number notified was 26, and the number of children adopted was 26.

(xi) *Arrangements for Dental, Orthopaedic, etc., cases.*

These arrangements are unchanged.

(xii) *Fruit Juices and Cod Liver Oil.*

In connexion with the scheme for the distribution of vitamins administered by the Ministry of Food, the assistance outlined previously was continued.

4. *Nursing Homes.*

There is nothing exceptional to report.



## SECTION C.

## SANITARY CIRCUMSTANCES OF THE AREA

1. (i) *Water.*

In this report very full details are requested in connexion with the water supply, and the Borough Water Engineer, Mr. R. V. Toms, has kindly supplied some of the information.

(i) *Whether the water supply has been satisfactory (a) in quality; (b) in quantity.*

(a) The water supply has been maintained throughout the area of supply at a high standard of quality.

(b) Although there is ample quantity available some difficulty was experienced in getting sufficient water to the district during the peak summer months: this was due partly to the abnormal number of visitors and partly to the fact that the present trunk mains are not capable of delivering the quantity of water required for such abnormal peak periods. The Ministry of Health have now authorised the laying of a new 18 inch trunk main which, when completed, will overcome this trouble during the peak load periods.

(ii) *Where there is a piped supply, whether bacteriological examinations were made of the raw water and, where treatment is installed, of the water going into supply; if so, how many and the results obtained; the results of any chemical analyses.*

Bacterial and chemical examinations have been made of both raw and treated water. The water is treated at the Watershed with lime to produce a pH of approximately 9.2, which allows for a pH of about 7.5 when the water reaches the consumer. The water is also filtered and chlorinated to obtain a residual of 0.25 to 0.5 parts per million.

Comprehensive analyses of the raw water numbered 3, bacteriological and chemical, as follows:

REPORTS BY THE COUNTIES PUBLIC HEALTH LABORATORIES,  
66 VICTORIA STREET, LONDON, S.W.1.

The results of chemical examination of samples of water received on and after 1st January, 1947, are being expressed in terms of parts per million, instead of parts per 100,000. This change has been made in conformity with the modern practice which, though not arising from organised agreement, has become widespread.

1. SAMPLE 21.4.47. TRENCHFORD RESERVOIR (UNTREATED).  
CHEMICAL RESULTS IN PARTS PER MILLION.

*Appearance:* Bright with slight flocculent deposit of mineral and organic debris. Many diatoms, few chlorophyceae and infusoria present. Turbidity (Silica Scale): less than 5.



|                                   |           |        |                                 |      |      |      |
|-----------------------------------|-----------|--------|---------------------------------|------|------|------|
| Colour Hazen.                     | Less than | 10     | Odour                           | .... | .... | Nil  |
| Reaction pH                       | ....      | 6.7    | Free Carbon Dioxide             | .... |      | 3    |
| Electric conductivity at 20°C     | ....      | 90     | Total solids, dried at 180°C    |      |      | 65   |
| Chlorine in Chlorides             | ....      | 13     | Alkalinity as Calcium Carbonate | .... | .... | 4    |
| Hardness : Total                  | ....      | 35     | { Carbonate { Non-carbonate     |      |      |      |
| Nitrogen in Nitrates              | ....      | 1.6    | { temporary 4 { permanent       |      |      | 31   |
| Free Ammonia                      | ....      | 0.014  | Nitrogen in Nitrites. Less than | .... | .... | 0.01 |
| Albuminoid Ammonia                | ....      | 0.080  | Free Chlorine reaction          | .... |      | —    |
| Oxygen absorbed in 4 hrs. at 27°C | ....      | 0.90   |                                 |      |      |      |
| Metals : Iron                     | ....      | 0.03   |                                 |      |      |      |
| Other metals                      | ....      | Absent |                                 |      |      |      |

### BACTERIOLOGICAL RESULTS.

(Bacteriological sampling bottles are treated to remove free chlorine if this is present at the sampling time).

|  |   |            |                     |
|--|---|------------|---------------------|
| Number of Bacteria growing on Agar per c.c. or ml. in. | } 1 day at 37°C. 2 days at 37°C. 3 days at 20°C.<br>0. 1. 40. |            |                     |
| Presumptive Coliform Reaction                          | Present*  | in 100 ml. | Absent from 50 ml.  |
| Bact. coli   | Present   | in —       | Absent from 100 ml. |
| Cl. welchii Reaction                                   | Present   | in 100 ml. | Absent from 10 ml.  |

\* False presumptive reaction.

This sample is practically clear and bright in appearance, having only a trace of matter in suspension. Low forms of life normal to surface water are present. The water is faintly acid in reaction, soft in character and deficient in alkalinity. It is free from noticeable colour and is of satisfactory organic and bacterial purity.

Treatment is required to restrain corrosive activity.

## 2. SAMPLE 21.4.47. FERNWORTHY SUPPLY AT TRENCHFORD OUTLET GUAGE (UNTREATED).

### CHEMICAL RESULTS IN PARTS PER MILLION.

*Appearance* : Very faint opalescence with slight flocculent deposit of light yellow brown mineral debris. Few chlorophyceae present.  
*Turbidity (Silica Scale)* : Less than 5.

|                                    |      |                                 |      |        |     |
|------------------------------------|------|---------------------------------|------|--------|-----|
| Colour Hazen :                     |      | Odour                           | .... | ....   | Nil |
| Slight Yellow-brown                | .... | Free Carbon Dioxide             | .... |        | 3   |
| Reaction pH                        | .... | Total solids, dried at 180°C    |      |        |     |
| Electric conductivity at 20°C      | .... | C                               | .... | ....   | 35  |
| Chlorine in Chlorides              | .... | Alkalinity as Calcium Carbonate | .... | ....   | 2   |
| Hardness : Total                   | .... | { Carbonate { Non-carbonate     |      |        |     |
| Nitrogen in Nitrates               | .... | { temporary 2 { permanent       |      |        | 8   |
| Free Ammonia                       | .... | Nitrogen in Nitrites            | .... | Absent |     |
| Albuminoid Ammonia                 | .... | Free Chlorine reaction          | .... |        | —   |
| Oxygen absorbed in 4 hours at 27°C | .... |                                 |      |        |     |
| Metals : Iron                      | .... |                                 |      |        |     |
| Other metals                       | .... |                                 |      |        |     |

## BACTERIOLOGICAL RESULTS.

(Bacteriological Sampling bottles are treated to remove free chlorine if this is present at the time of sampling).

|                               |          |  |             |        |
|-------------------------------|----------|--|-------------|--------|
| Number of Bacteria grow-      |          | } 1 day at 37°C. 2 days at 37°C. 3 days at 20°C. |             |        |
| ing on Agar per c.c. or       |          |  |             |        |
| ml. in                        | ....     | 2.   | 7.          | 120.   |
| Presumptive Coliform Reaction | Present* | in 10 ml.  | Absent from | 1 ml.  |
| Bact. coli (Type 1)           | ....     | Present in 50 ml.                                | Absent from | 10 ml. |
| Cl. welchii Reaction          | ....     | Present in 100 ml.                               | Absent from | 10 ml. |

\* False presumptive reaction.

This sample is practically clear and bright in appearance having only very faint opalescence and a trace of matter in suspension. The water is faintly acid in reaction, very soft in character and deficient in alkalinity. It shows distinct but not marked colour and is of satisfactory organic quality for this raw supply. Slight bacterial impurity is shown indicative of contamination by matter of excremental origin, Bact. coli and Cl. welchii being present in small amounts.

Treatment is required to restrain corrosive action and to produce water of a high standard of bacterial purity.

### 3. SAMPLE 20.10.47. TRENCHFORD RESERVOIR (UNTREATED). BACTERIOLOGICAL ANALYSIS ONLY.

(Sampling bottles are treated to remove free chlorine if this is present at the time of sampling).

|                               |                   |   |             |        |
|-------------------------------|-------------------|---|-------------|--------|
| Number of Colonies de-        |                   | } 1 day at 37°C. 2 days at 37°C. 3 days at 20°. |             |        |
| veloping on Agar per c.c.     |                   |   |             |        |
| or ml. in                     | ....              | 160.  | 200.        | 140.   |
| Presumptive Coliform Reaction | Present in 50 ml. | Absent from                                     | 10 ml.      |        |
| Bact. coli (Type 1)           | ....              | Present in 50 ml.                               | Absent from | 10 ml. |
| Cl. welchii Reaction          | ....              | Present in 100 ml.                              | Absent from | 10 ml. |

This sample has faint opalescence and slight deposit but it is not excessively turbid. The water has an appreciable bacterial content but it shows only slight evidence of contamination by excremental matters since Bact. coli are present only in a small number. As far as its bacterial content indicates, the water would be amenable to treatment for the production of a public supply.

A comprehensive analysis of the treated water going into supply numbered 1, bacteriological and chemical, at the Water works, as follows :

### SAMPLE 21.4.47. TAP OFF MAIN OF WATERWORKS STORES, TORQUAY.

(Treated Water : filtered, limed, chlorinated)

#### CHEMICAL RESULTS IN PARTS PER MILLION.

*Appearance* : Bright with very slight deposit of mineral debris.

Turbidity (Silica Scale) Less than 5.

|                                |         |        |                               |      |       |
|--------------------------------|---------|--------|-------------------------------|------|-------|
| Colour Hazen                   | ....    | Nil    | Odour                         | .... | Nil   |
| Reaction pH                    | Neutral | 7.5    | Free Carbon Dioxide           | .... | Trace |
| Electric conductivity at 20° C | 100     |        | Total solids, dried at 180° C |      | 70    |
| Chlorine in Chlorides          | ....    | 13     | Alkalinity as Calcium Car-    |      |       |
|                                |         |        | bonate                        | .... | 9     |
| Hardness : Total               | ....    | 40     | { Carbonate { Non-carbonate   |      |       |
|                                |         |        | { temporary 9 { permanent     |      |       |
| Nitrogen in Nitrates           | ....    | 1.4    | Nitrogen in Nitrites          |      |       |
| Free Ammonia                   | ....    | 0.012  | ....                          |      |       |
| Albuminoid Ammonia             | ....    | 0.010  |                               |      |       |
| Oxygen absorbed in 4 hours     |         |        |                               |      |       |
| at 27°C                        | ....    | 0.25   |                               |      |       |
| Metals : Iron                  | ....    | 0.05   |                               |      |       |
| Other metals                   | ....    | Absent |                               |      |       |
| Free chlorine reaction         | ....    | Absent |                               |      |       |



## BACTERIOLOGICAL RESULTS.

| Number of Bacteria grow-<br>ing on Agar per c.c. or<br>ml. in | ....       | .... | } 1 day at 37°C. 2 days at 37°C. 3 days at 20°C |    |    |
|---|------------|------|---|----|----|
|   |            |      | 0.  | 0. | 10 |
| Presumptive Coliform Reaction                                 | Present in | —.   | Absent from 100 ml.                             |    |    |
| Bact. coli  | ....       | .... | Present in —.                                   |    |    |
| Cl. welchii Reaction  | ....       | .... | Present in —.                                   |    |    |

This sample is practically clear and bright in appearance, having only a trace of matter in suspension, neutral in reaction and free from metals apart from a negligible trace of iron. The water is soft in character and has a comparatively low content of mineral constituents in solution. It is free from colour, of very satisfactory organic quality and of the highest standard of bacterial purity.

These results are consistent with a pure and wholesome water suitable for public supply purposes.

(Signed) GORDON MILES,  
for The Counties Public Health Laboratories.

Samples are also taken regularly each week from a variety of sources in the Borough such as taps in private houses, canteens, dairies, drinking fountains, schools, and farms, and occasionally from the storage reservoirs. 42 such samples were submitted for bacteriological examination.

The results of 25 bacteriological examinations showed consistently good results, viz. :

PUBLIC HEALTH LABORATORY SERVICE,  
EXETER.

“ Probable number of coli-aerogenes organisms per 100 ml.=nil. This sample is satisfactory bacteriologically.”

In the case of 17 other samples the examination showed that the probable number of coli-aerogenes per 100 ml. ranged from 2 to 17, but in no case was Bact. coli of the faecal type detected.

The quality of the water entering supply is good, but some slight deterioration is liable to occur during its passage to the consumer : some organic matter may gain access in the local mains, probably as stated last year from vegetable matter which seems to have a connexion with the season of the year, while slight contamination may occur in service reservoirs and cisterns or from washers on service taps. This explains the possible access in limited numbers of coliform organisms of the non-faecal type.

(iii) *Where the waters are liable to have plumbo-solvent action the facts as to contamination by lead, including precautions taken and the number and result of analyses.*

In all the analyses no trace of metals was found except a minute trace of iron. The pH is maintained at the level mentioned previously to avoid action on lead.

(iv) *Action in respect of any form of contamination.*

No special action has been required but strict precautions are maintained in connexion with the sanitary arrangements for the men carrying out forestry work on the watershed. The chlorination of the water is an added safeguard.

(v) *Particulars of the proportion of dwelling houses and the proportion of the population supply from public water mains (a) direct to the houses ; (b) by means of standpipes.*

(a) The proportion of dwelling houses with a supply from public water mains direct to the houses is 98.75 per cent, and the proportion of the population thus supplied is 98.5 per cent.

(b) The proportion of dwelling houses supplied by means of standpipes is 1.25 per cent, the proportion of the population thus supplied being 1.5 per cent.

(ii) *Drainage and Sewerage.*

The Borough Engineer, Mr. P. W. Ladmore, M.Inst.C.E., has kindly given the following details and those in connexion with public cleansing and salvage.

The only extensive sewerage works carried out during this year were on Corporation Housing Estates. The lengths laid, together with all incidental works, were approximately as follows :—

Upper Cadewell Temporary Housing Estate—3,100 lin. yds. of foul and surface water sewer between 9" and 15" dia.

Lummaton Estate—2,800 lin. yds. of 9" dia. combined sewer.

Watcombe—1,021 lin. yds. of 9" combined sewer.

Coombe Pafford Estate—

262 lin. yds. of 27" dia. combined sewer.

208    "    "    " 24"    "    "    "

47     "    "    " 12"    "    "    "

1,800   "    "    " 9"    "    "    "

In addition to the above measurements on this estate, the ditches passing through the land which is being developed have been piped in, a length of 530 lin. yds. of pipes between 6" and 24" dia.

A reinforced concrete culvert 42 yards in length, has been constructed through part of the open space and under Coombe Road, and a concrete open channel has also been made through the large open space on the estate.

(iii) *Public Cleansing.*

Certain alterations have been made in the arrangements for collection of refuse in order to incorporate the new Housing Estates. So far it has been possible to arrange for this without employing an extra vehicle.



(iv) *Salvage.*

The collection and recovery of salvable material continue, but emphasis might with advantage be laid on the necessity for salvaging more waste paper and kitchen waste.

The following are the details of the amounts recovered :

|                          |     |     | <i>Tons</i> | <i>Cwts.</i> |
|--------------------------|-----|-----|-------------|--------------|
| Paper and Cardboard      | ... | ... | 450         | 12           |
| Metal : ferrous          | ... | ... | 103         | 11           |
| Metal : non-ferrous      | ... | ... | 30          | 6            |
| Textiles                 | ... | ... | 9           | 9            |
| Oil                      | ... | ... | —           | 17           |
| String                   | ... | ... | 2           | 3            |
| Bones                    | ... | ... | —           | 12           |
| Rubber                   | ... | ... | —           | 4            |
| Kitchen Waste :          |     |     |             |              |
| Collected by Corporation | ... | ... | 715         | 5            |
| Collected by Pig-keepers | ... | ... | 103         | 16           |
| Bottles and Jars         | ..  | ..  | 1347 doz.   |              |
| Number of Hats           | ..  | ..  | 768         |              |

2. *Sanitary Inspection of the Area.*

The inspection of all districts in the Borough has been very efficiently carried out during the year under your Senior Sanitary Inspector who gives the following details of the organisation and work.

After the changes in staff, previously referred to, some alteration was made in the organisation of this section with a view to introducing semi-specialisation of the work. Each District Sanitary Inspector continues to be responsible generally for his district, but deals with the work of one speciality throughout the town : thus one inspector carries out all the work in connexion with drainage, together with the Port Inspection and the supervision of the rodent operatives, another inspector carries out the work of food inspection, including the slaughterhouse work, and the sampling under the Food and Drugs Act, the third inspector deals with housing inspection and defects, and the fourth undertakes the many duties in connexion with milk and with the farms and dairies.

This Scheme, tentative in nature and somewhat experimental for a small area, has made an encouraging start ; it gives greater incentive to the individual inspector to become especially proficient in one particular section, it gives more uniformity in inspection, and it enables each inspector to become better acquainted with all the persons and outside staff concerned in the particular branch of work. Moreover each inspector, so far as his speciality is concerned, keeps his colleagues informed of what is going on in their districts ; so that each still maintains a thorough knowledge of his own district, in addition to his special experience. The co-operation and work of the individual inspectors have been excellent, and a high standard is being developed in all the wide range of duties.



| <i>Dwelling Houses.</i>          |      |      |      |      | <i>No.<br/>inspected.</i> |
|----------------------------------|------|------|------|------|---------------------------|
| Under Public Health Acts         | .... | .... | .... | .... | 450                       |
| Under Housing Acts               | .... | .... | .... | .... | 355                       |
| Overcrowding                     | .... | .... | .... | .... | 14                        |
| Verminous Premises               | .... | .... | .... | .... | 80                        |
| Rats and Mice—Premises inspected | .... | .... | .... | .... | 8147                      |
| Premises treated                 | .... | .... | .... | .... | 562                       |
| New Houses—Permanent             | .... | .... | .... | .... | 60                        |
| Pre-fabricated                   | .... | .... | .... | .... | 240                       |

| <i>General Public Health.</i> |      |      |      |      |     |
|-------------------------------|------|------|------|------|-----|
| Drains and sewers :           |      |      |      |      |     |
| Inspected                     | .... | .... | .... | .... | 370 |
| Tests applied                 | .... | .... | .... | .... | 243 |
| Cesspools                     | .... | .... | .... | .... | 116 |
| Stables                       | .... | .... | .... | .... | 6   |
| Piggeries                     | .... | .... | .... | .... | 3   |
| Open spaces                   | .... | .... | .... | .... | 2   |
| Public Conveniences           | .... | .... | .... | .... | 100 |
| Tents, Vans, Sheds, etc.      | .... | .... | .... | .... | 60  |
| Factories                     | .... | .... | .... | .... | 77  |
| Workplaces                    | .... | .... | .... | .... | 1   |
| Outworkers                    | .... | .... | .... | .... | 2   |
| Common Lodging Houses         | .... | .... | .... | .... | 15  |
| Smoke Observations            | .... | .... | .... | .... | 1   |
| Cinemas, Dance Halls          | .... | .... | .... | .... | 2   |
| Marine Stores                 | .... | .... | .... | .... | 2   |
| Shops—Shops Act               | .... | .... | .... | .... | 10  |
| Schools                       | .... | .... | .... | .... | 6   |
| Offices                       | .... | .... | .... | .... | 6   |
| Ships                         | .... | .... | .... | .... | 224 |
| Pig Swill Bins                | .... | .... | .... | .... | 40  |

| <i>Water.</i>         |      |      |      |      |    |
|-----------------------|------|------|------|------|----|
| Water Supply—Visits   | .... | .... | .... | .... | 50 |
| Samples               | .... | .... | .... | .... | 42 |
| Swimming Baths—Visits | .... | .... | .... | .... | 54 |
| Samples               | .... | .... | .... | .... | 62 |
| Chlorine Tests        | .... | .... | .... | .... | 52 |

| <i>Meat and Food.</i>    |      |      |      |      |     |
|--------------------------|------|------|------|------|-----|
| Meat Shops, Stalls, etc. | .... | .... | .... | .... | 89  |
| Slaughterhouses          | .... | .... | .... | .... | 364 |
| Cowsheds                 | .... | .... | .... | .... | 33  |

| <i>Meat and Food—continued..</i> |      |      |      |      |      | <i>No. inspected.</i> |
|----------------------------------|------|------|------|------|------|-----------------------|
| Dairies                          | .... | .... | .... | .... | .... | 155                   |
| Samples—Devon County Council     | .... | .... | .... | .... | .... | 171                   |
| National Milk Testing            | .... | .... | .... | .... | .... | 595                   |
| Bakehouses                       | .... | .... | .... | .... | .... | 17                    |
| Hotels                           | .... | .... | .... | .... | .... | 18                    |
| Ice-cream Premises               | .... | .... | .... | .... | .... | 253                   |
| Fishmongers                      | .... | .... | .... | .... | .... | 30                    |
| Fish Quay                        | .... | .... | .... | .... | .... | 172                   |
| Fish Fryers                      | .... | .... | .... | .... | .... | 5                     |
| Greengrocers                     | .... | .... | .... | .... | .... | 68                    |
| Grocers                          | .... | .... | .... | .... | .... | 284                   |
| Restaurants                      | .... | .... | .... | .... | .... | 56                    |
| Other Premises                   | .... | .... | .... | .... | .... | 31                    |

*Miscellaneous.*

|                         |      |      |      |      |      |
|-------------------------|------|------|------|------|------|
| Complaints investigated | .... | .... | .... | .... | 299  |
| Effluvia nuisances      | .... | .... | .... | .... | 2    |
| Other visits            | .... | .... | .... | .... | 2159 |
| Infectious diseases     | .... | .... | .... | .... | 37   |

## NOTICES SERVED.

|                        | <i>Verbal</i> |                      | <i>Written</i> |                      | <i>Statutory</i> |                      | <i>Total</i>  |                      |
|------------------------|---------------|----------------------|----------------|----------------------|------------------|----------------------|---------------|----------------------|
|                        | <i>Served</i> | <i>Complied with</i> | <i>Served</i>  | <i>Complied with</i> | <i>Served</i>    | <i>Complied with</i> | <i>Served</i> | <i>Complied with</i> |
| Public Health Act .... | 329           | 293                  | 85             | 76                   | 2                | —                    | 416           | 369                  |
| Housing Act ....       | 5             | 4                    | 172            | 60                   | —                | 10                   | 177           | 74                   |
| Factory Act ....       | 19            | —                    | 11             | 2                    | —                | —                    | 30            | 2                    |

## FACTORIES ACT, 1937.

The accompanying tables give the details of the inspections and of the defects found : only two outworkers are now employed and registered in the Borough. And there is nothing exceptional to report in connexion with the administration of this section.

### 1. INSPECTION OF FACTORIES.

(Including inspections made by the Sanitary Inspectors).

| Premises<br>(1)  | M/c<br>line<br>No.<br>(2) | Number<br>on<br>Register<br>(3) | Number of               |                           |                                |
|--|---------------------------|---------------------------------|-------------------------|---------------------------|--------------------------------|
|  |                           |                                 | Inspec-<br>tions<br>(4) | Written<br>notices<br>(5) | Occupiers<br>prosecuted<br>(6) |
| (i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities ...                         | 1                         | 58                              | 8                       | 2                         | —                              |
| (ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority ... ..                      | 2                         | 206                             | 64                      | 9                         | —                              |
| (iii) Other Premises in which Section 7 is enforced by the Local Authority †(excluding out-workers' premises) ... .. | 3                         | 5                               | 5                       | —                         | —                              |
| TOTAL ... ..   |                           | 269                             | 77                      | 11                        | —                              |

### 2. CASES IN WHICH DEFECTS WERE FOUND.

| Particulars<br>(1)   | M/c<br>line<br>No.<br>(2) | Number of cases in which defects were found |                 |                             |                             | Number of cases in which prosecutions were instituted<br>(7) |
|--|---------------------------|---|-----------------|-----------------------------|-----------------------------|--|
|  |                           | Found<br>(3)                                | Remedied<br>(4) | To H.M.<br>Inspector<br>(5) | By H.M.<br>Inspector<br>(6) |  |
| Want of cleanliness (S.1)j ... ..  | 4                         | 10  |                 |                             |                             |  |
| Overcrowding (S.2) ... ..  | 5                         | 1   |                 |                             |                             |  |
| Unreasonable temperature (S.3) ... ..  | 6                         | 5   |                 |                             |                             |  |
| Inadequate ventilation (S.4) ... ..  | 7                         | 4   |                 |                             |                             |  |
| Ineffective drainage of floors (S.6) ... ..  | 8                         | —   |                 |                             |                             |  |
| Sanitary Conveniences (S.7)—   |                           |   |                 |                             |                             |  |
| (a) Insufficient ... ..  | 9                         | 3   | —               | 1                           | —                           | —  |
| (b) Unsuitable or defective ... ..   | 10                        | 5   | 1               | —                           | —                           | —  |
| (c) Not separate for sexes ... ..  | 11                        | 1   | 1               | —                           | —                           | —  |
| Other offences against the Act (not including offences relating to Outwork) ... .. | 12                        | 16  | —               | —                           | —                           | —  |
| TOTAL ... ..   | 60                        | 45  | 2               | 1                           | —                           | —  |

OUTWORK.  
(Sections 110 and 111)

| Nature of Work<br>(1)   | M/c<br>line<br>No.<br>(2) | Section 110  |   |  | Section 111  |                          |                          |
|---|---------------------------|--|---|--|--|--------------------------|--------------------------|
|   |                           | No. of<br>out-<br>workers<br>in August<br>list<br>required<br>by Sect.<br>110 (1) (c)<br>(3) | No. of<br>cases of<br>default<br>in sending<br>lists to the<br>Council<br>(4) | No. of<br>prosecu-<br>tions for<br>failure to<br>supply lists<br>(5) | No. of<br>instances<br>of work in<br>unwhole-<br>some<br>Premises<br>(6) | Notices<br>served<br>(7) | Prosecu-<br>tions<br>(8) |
| Wearing apparel { Making, etc. ...  | 14                        | 2  |   |  |  |                          |                          |
| Wearing apparel { Cleaning and washing  | 15                        |  |   |  |  |                          |                          |
| Household linen ...   | 16                        |  |   |  |  |                          |                          |
| Lace, lace curtains and nets ...  | 17                        |  |   |  |  |                          |                          |
| Curtains and furniture hangings   | 18                        |  |   |  |  |                          |                          |
| Furniture and upholstery ...  | 19                        |  |   |  |  |                          |                          |
| Electro-plate ...   | 20                        |  |   |  |  |                          |                          |
| File making ...   | 21                        |  |   |  |  |                          |                          |
| Brass and brass articles ...  | 22                        |  |   |  |  |                          |                          |
| Fur pulling ...   | 23                        |  |   |  |  |                          |                          |
| Iron and steel cables and chains  | 24                        |  |   |  |  |                          |                          |
| Iron and steel anchors and grapnels ...   | 25                        |  |   |  |  |                          |                          |
| Cart gear ...   | 26                        |  |   |  |  |                          |                          |
| Locks, latches and keys ...   | 27                        |  |   |  |  |                          |                          |
| Umbrellas, etc. ...   | 28                        |  |   |  |  |                          |                          |
| Artificial flowers ...  | 29                        |  |   |  |  |                          |                          |
| Nets, other than wire nets ...  | 30                        |  |   |  |  |                          |                          |
| Tents ...   | 31                        |  |   |  |  |                          |                          |
| Sacks ...   | 32                        |  |   |  |  |                          |                          |
| Racquet and tennis balls ...  | 33                        |  |   |  |  |                          |                          |
| Paper bags ...  | 34                        |  |   |  |  |                          |                          |
| The making of boxes or other receptacles or parts thereof made wholly or partially of paper ... | 35                        |  |   |  |  |                          |                          |
| Brush making ...  | 36                        |  |   |  |  |                          |                          |
| Pea picking ...   | 37                        |  |   |  |  |                          |                          |
| Feather sorting ...   | 38                        |  |   |  |  |                          |                          |
| Carding, etc., of buttons, etc. ...   | 39                        |  |   |  |  |                          |                          |
| Stuffed toys ...  | 40                        |  |   |  |  |                          |                          |
| Basket making ...   | 41                        |  |   |  |  |                          |                          |
| Chocolates and sweetmeats ...   | 42                        |  |   |  |  |                          |                          |
| Cosaques, Christmas crackers, Christmas stockings, etc. ...                                     | 43                        |  |   |  |  |                          |                          |
| Textile weaving ...   | 44                        |  |   |  |  |                          |                          |
| Lampshades ...  | 45                        |  |   |  |  |                          |                          |
| TOTAL ...   | 70                        | 2  | -   | -  | -  | -                        | -                        |



*Measures against Rodents.*

This work has been well maintained on the lines laid down by the Ministry of Agriculture and Fisheries under your Senior Sanitary Inspector, who gives the following details :

After the complete treatment of the sewers within the Borough, maintenance treatment is being carried out. Two maintenance treatments at six-monthly intervals are needed to comply with the Ministry's requirements ; one treatment has been completed and the second is well advanced and will be completed by 31st March, 1948. During these treatments, 2,650 manholes were baited ; 1 complete, 420 good and 398 small poison takes were recorded giving an estimated number of 1,753 rats killed.

The maintenance treatment of sewers is designed to prevent rats breeding and the above results prove the necessity for, and efficiency of, the method.

In connexion with surface control, the approved method of area block control has been continued. The Borough has been divided into 10 areas for this purpose and the object is to concentrate on the area in an endeavour to clear it of rats, rather than deal with individual complaints. During this treatment 8,147 premises were visited and 562 were found to be rat infested. 95 complete, 719 good and 941 small poison takes were recorded giving an estimated number of 2,988 rats killed.

Close co-operation is maintained with the Devon Agricultural Executive Committee who are responsible for the treatment of all agricultural land and buildings around the Borough.

The whole of the Borough area has been inspected by the Ministry's Local Inspector who has expressed satisfaction at the work carried out.



## SECTION D.

## HOUSING

The two estates of temporary houses were completed during the year and comprise 97 houses on the Cadewell Estate and 143 on the Lummaton Estate. The number of permanent houses completed during the year on the Watcombe Estate is 22 and 100 are in course of erection. On the Coombe Pafford Estate the number completed is 38 and a further 70 are in course of erection.

No other estates were commenced during the year.

The number of new houses completed by private builders during the year was 99.

The requisitioning of premises was continued ; and at the end of the year 35 houses were held under requisition by which accommodation was provided for 57 families.

The difficulties, already very considerable, were intensified of remedying the many and varied defects which have resulted from the inability of owners during these long years of emergency to keep their properties in a good state of repair. Shortages of labour and of material are too well-known to require description, and it has been necessary to reduce even essential repairs to the barest minimum. However, it was possible to have 150 houses, which were not in all respects fit for habitation, rendered fit, chiefly as a result of informal action.

It is impossible to give an accurate picture of overcrowding, for this is a problem the solution of which can only come by very slow degrees. In 14 of the most acute cases, ascertained during the year, action was taken to abate the overcrowding.

## SECTION E.

## INSPECTION AND SUPERVISION OF FOOD

(a) *Milk Supply.*(iv) *Bacteriological Examination of Milk.*

Samples of milk have continued to be sent to the Public Health Laboratory Service each week. A total of 171 samples were submitted for examination, and the results are shown in the following tables :

| <i>Ordinary</i> |               | <i>Accredited</i> |               | <i>Tuberculin<br/>Tested</i> |               | <i>Pasteurised</i> |               | <i>Total</i>  |               |
|-----------------|---------------|-------------------|---------------|------------------------------|---------------|--------------------|---------------|---------------|---------------|
| <i>Passed</i>   | <i>Failed</i> | <i>Passed</i>     | <i>Failed</i> | <i>Passed</i>                | <i>Failed</i> | <i>Passed</i>      | <i>Failed</i> | <i>Passed</i> | <i>Failed</i> |
| 45              | 78            | 10                | 7             | 17                           | 10            | 3                  | 1             | 75            | 96            |

All these samples are taken either at the farm at the time of production or in course of delivery to the retailer. The standard adopted by the Bacteriologist for ordinary milk is the same as that applied to accredited milk, and it is therefore not surprising to find a high percentage of failures. Again, most of the milk consumed in the Borough is produced in adjoining districts. The percentage of failures in samples taken from producers of non-designated milk inside the Borough was 43.7 per cent against 62.9 per cent outside the Borough.

(v) *Heat-treated Milk.*

One additional licence was granted towards the end of the year for a holder pasteurisation plant which meets all modern requirements: this plant was subsequently registered early in 1948 under Defence Regulation 55G.

Regular samples have been obtained from the one plant previously registered under the Regulation 55G, and the results are sent each month to the Milk Marketing Board at Thames Ditton. A total of 19 samples gave the following results :

|                                  | <i>Passed</i> | <i>Failed</i> |
|----------------------------------|---------------|---------------|
| Phosphatase test .. .. .         | 18            | 1             |
| Methylene Blue reduction test .. | 19            | —             |

(vi) *National Milk-Testing and Advisory Scheme.*

In this connexion the sanitary inspectors have co-operated by taking samples from all producers bringing milk into the Borough for submission to the National Milk-Testing and Advisory Scheme's Laboratory. The Scheme is concerned primarily with the improvement of the general keeping quality of milk, and is particularly useful in improving conditions under which milk is produced outside the Borough; for when a sample is found to be unsatisfactory a visit is made to the farm by a Dairy Instructress, who



advises the farmer on the production of clean milk. The test applied to samples submitted under this Scheme is the Resazurin Reduction Test, and the results are classified as follows : " A "—Satisfactory ; " B "—Doubtful ; and " C "—Poor. During the year 595 samples were taken on delivery throughout the town and submitted to the testing laboratory : 352 were classified " A," 91 were in category " B," and 152 in category " C." The number of failures represents a percentage of 25.5 compared to the previous year's figure of 21.0.

The particularly fine summer was to a great extent responsible for the increase in the number of samples failing : and the accompanying table shows the monthly percentage of samples in Resazurin Test " C " grading (Failures) and the monthly mean temperature :

|           |      |      |      | <i>Percentage of<br/>Samples failing.</i> | <i>Mean temperature<br/>in Deg. Fahr.</i> |
|-----------|------|------|------|---|---|
| January   | .... | .... | .... | 5.2                                       | 46  |
| February  | .... | .... | .... | 0.0                                       | 42  |
| March     | .... | .... | .... | 7.6                                       | 47  |
| April     | .... | .... | .... | 18.6                                      | 49  |
| May       | .... | .... | .... | 21.5                                      | 52  |
| June      | .... | .... | .... | 34.6                                      | 54  |
| July      | .... | .... | .... | 48.2                                      | 56  |
| August    | .... | .... | ..   | 87.8                                      | 58  |
| September | ...  | .... | .... | 77.0                                      | 56  |
| October   | .... | ...  | .... | 64.1                                      | 53  |
| November  | .... | .... | .... | 34.3                                      | 50  |
| December  | .... | .... | ...  | 5.0                                       | 47  |

From the table it will be seen that the rise and decline in the number of failures closely correspond with the variations in temperature during the year. The growth of bacteria is entirely determined by the initial number present in the milk and by the temperature at which the milk is retained after production. At or below the freezing point of milk (about 31°F) there is no multiplication of bacteria. As temperatures rise there is a progressively rapid development of the acid producing organisms which are responsible for the early souring of milk. Better cooling facilities at the farms, in conjunction with the increased attention to cleanliness, which is ceaselessly being advocated, would doubtless have reduced the number of failures.

On the other hand it is felt that quite a considerable amount of milk was wasted during the summer which could have been saved by a little commonsense and ordinary care on the part of the public. Far too often were bottles of milk left lying on doorsteps in the hot sun until quite late in the day, and when taken inside were not always stored in cool places. Furthermore, the elementary process of boiling would have retarded the souring process.



(vii) *Sterility Tests.*

No matter what precautions are taken to produce a clean milk supply, the use of insufficiently sterilised bottles and equipment will result in poor samples, and much careful work at the farm is often undone by careless handling and lack of attention to efficient sterilisation at the dairy. In this connexion sterility tests have been regularly made at the two pasteurising establishments and also at other dairies where coolers and bottling machines are used. Rinses are made of churns and bottles, and swabs taken from the surfaces of coolers, tipping tanks, balancing tanks and holders; these are then submitted to the testing laboratory. Samples of detergent solution are also taken.

Results at first indicated that sufficient attention was not being paid to sterilisation, and a great deal of work was done by the Sanitary Inspector in trying to improve these conditions. Recent tests have shown that an improvement has been achieved, but constant supervision is necessary to ensure the maintenance of good standards.

(b) *Meat and Other Foods.*(i) *Inspection of Meat.*

The following table gives the details of the inspections :

CARCASSES INSPECTED AND CONDEMNED.

|   | <i>Cattle,<br/>exclud-<br/>ing<br/>Cows</i> | <i>Cows</i> | <i>Calves</i> | <i>Sheep<br/>and<br/>Lambs</i> | <i>Pigs</i> |
|---|---|-------------|---------------|--------------------------------|-------------|
| Number killed (if known) ....   | 944   | 897         | 614           | 12034                          | 100         |
| Number inspected ....   | 944   | 897         | 614           | 12034                          | 100         |
| ALL DISEASES EXCEPT<br>TUBERCULOSIS :   |   |             |               |                                |             |
| Whole carcasses condemned ....  | —   | 2           | 3             | 24                             | —           |
| Carcasses of which some part or<br>organ was condemned ....                                 | 383   | 502         | 8             | 3620                           | 8           |
| Percentage of the number<br>inspected affected with disease<br>other than tuberculosis .... | 40.6  | 55.7        | 1.7           | 30.3                           | 8           |
| TUBERCULOSIS ONLY :   |   |             |               |                                |             |
| Whole carcasses condemned ....  | 4   | 6           | —             | —                              | —           |
| Carcasses of which some part or<br>organ was condemned ....                                 | 61  | 188         | 1             | —                              | 7           |
| Percentage of the number<br>inspected affected with tuber-<br>culosis ....                  | 6.9   | 21.7        | 0.2           | —                              | 7           |

(ii) *Inspection of Other Foods.*

Other Food condemned included :—

|                                | <i>Weight<br/>in lbs.</i> |
|--------------------------------|---------------------------|
| Canned Vegetables ....         | 5202                      |
| „ Fruit ....                   | 6087 $\frac{3}{4}$        |
| „ Soup ....                    | 396 $\frac{1}{4}$         |
| „ Meat ....                    | 1900 $\frac{1}{4}$        |
| „ Fish ....                    | 660 $\frac{3}{4}$         |
| „ Milk ....                    | 903 $\frac{3}{4}$         |
| „ Conserves ....               | 365                       |
| „ Spaghetti ....               | 55                        |
| Cheese ....                    | 76                        |
| Butter ....                    | 154 $\frac{1}{2}$         |
| Margarine ....                 | 12 $\frac{1}{2}$          |
| Condiments and Pickles ....    | 307 $\frac{3}{4}$         |
| Rabbits ....                   | 24                        |
| Confectionery ....             | 71 $\frac{1}{4}$          |
| Sugar ....                     | 3 $\frac{1}{2}$           |
| Sausages ....                  | 218                       |
| Tea ....                       | $\frac{3}{4}$             |
| Bacon ....                     | 13 $\frac{1}{2}$          |
| Poultry ....                   | 216                       |
| Cereals (including flour) .... | 402 $\frac{1}{2}$         |
| Fish ....                      | 4171 $\frac{1}{4}$        |
| Vegetables ....                | 1902 $\frac{3}{4}$        |
| Dried Nuts ....                | 86                        |
| Dried Fruit ....               | 683                       |
| Fruit ....                     | 4319 $\frac{3}{4}$        |
| Canned Corn ....               | 24                        |
| Crumpets ....                  | 58                        |
| Eggs ....                      | 30 $\frac{3}{4}$          |
| Cocoa ....                     | 5                         |
| Gelatine ....                  | 23                        |
| Dried Fish ....                | 616                       |
| Dried Peas ....                | 112                       |
| Ice-Cream ....                 | 15 $\frac{3}{4}$          |
| Milk ....                      | 366                       |
| Biscuits ....                  | 47                        |
| Cake and Pudding Mixture ....  | 179 $\frac{1}{2}$         |
|                                | <hr/>                     |
|                                | 29710 $\frac{3}{4}$       |
|                                | <hr/>                     |

(Total weight condemned : 13 tons 5 cwt. 30 $\frac{3}{4}$  lb.)

(c) *Adulteration, etc.—Food and Drugs Act, 1938.*

The work under this Act has been continued, and the following is the record of samples taken :

|                      |      |      |      | <i>Formal</i>  |                | <i>Informal</i> |                |
|----------------------|------|------|------|----------------|----------------|-----------------|----------------|
|                      |      |      |      | <i>No. of</i>  | <i>Not</i>     | <i>No. of</i>   | <i>Not</i>     |
|                      |      |      |      | <i>Samples</i> | <i>Genuine</i> | <i>Samples</i>  | <i>Genuine</i> |
| Milk                 | .... | .... | .... | 1              | —              | 99              | 6              |
| Margarine            | .... | .... | .... | —              | —              | 3               | —              |
| Cooking Fat          | .... | .... | .... | —              | —              | 3               | —              |
| Butter               | .... | .... | .... | —              | —              | 3               | —              |
| Jams                 | .... | .... | .... | —              | —              | 2               | —              |
| Sugar                | .... | .... | .... | —              | —              | 3               | —              |
| Marmalade            | .... | .... | .... | —              | —              | 1               | —              |
| Coffee               | .... | .... | .... | —              | —              | 1               | —              |
| Meat Paste           | .... | .... | .... | —              | —              | 1               | —              |
| Pudding Mixture      | .... | .... | .... | —              | —              | 2               | —              |
| Chocolate Spread     | .... | .... | .... | —              | —              | 2               | —              |
| Ice-cream Powder     | .... | .... | .... | —              | —              | 1               | —              |
| Flours               | .... | .... | .... | —              | —              | 3               | —              |
| Semolina             | .... | .... | .... | —              | —              | 1               | —              |
| Gelatine             | .... | .... | .... | —              | —              | 1               | —              |
| Chocolate            | .... | .... | .... | —              | —              | 3               | —              |
| Cheese               | .... | .... | .... | —              | —              | 2               | —              |
| Tea                  | .... | .... | .... | —              | —              | 1               | —              |
| Orange Squash        | .... | .... | .... | —              | —              | 1               | —              |
| Lemonade Powder      | .... | .... | .... | —              | —              | 1               | —              |
| Sweetening Tablets   | .... | .... | .... | —              | —              | 1               | —              |
| Saccharin            | .... | .... | .... | —              | —              | 1               | —              |
| Curry Powder         | .... | .... | .... | —              | —              | 1               | —              |
| Pepper               | .... | .... | .... | —              | —              | 1               | —              |
| Flavourings          | .... | .... | .... | —              | —              | 1               | —              |
| Baking Powder        | .... | .... | .... | —              | —              | 1               | —              |
| Gravy Browning       | .... | .... | .... | —              | —              | 1               | —              |
| Custard Powder       | .... | .... | .... | —              | —              | 1               | —              |
| Cocoa                | .... | .... | .... | —              | —              | 1               | —              |
| Beer                 | .... | .... | .... | —              | —              | 2               | —              |
| Aspirin              | .... | .... | .... | —              | —              | 2               | —              |
| Stomach Powder       | .... | .... | .... | —              | —              | 1               | —              |
| Epsom Salts          | .... | .... | .... | —              | —              | 1               | —              |
| Camphorated Oil      | .... | .... | .... | —              | —              | 1               | —              |
| Bi-carbonate of Soda | .... | .... | .... | —              | —              | 1               | —              |

(d) *Ice-cream.*

The supervision and registration of premises where ice-cream is manufactured or sold have been carefully maintained ; for, as has been previously pointed out, ice-cream is an ideal medium for bacterial multiplication. The need cannot be over-emphasised for adequate sterilisation of all apparatus (and unless utensils are properly washed and cleaned first, they cannot be sterilised adequately), for the development of a “ no-touch technique ” (which means that hands should not be introduced into an ice-cream mix at any stage), and for the realisation of the greater danger if the hot-mix is not rapidly cooled with special apparatus (for any dangerous organisms introduced after heating have ideal conditions for multiplying during an inefficient cooling process).



The bacteriological examination of samples has been continued by the Public Health Laboratory Service at Exeter : and following the original work carried out by the Medical Research Council, a simple modified methylene blue test has been suggested for the grading of ice-cream :

| <i>Provisional<br/>Grade.</i> | <i>Time taken to reduce<br/>methylene blue.</i> | <i>Interpretation.</i> |
|-------------------------------|---|------------------------|
| 1.                            | 4½ hours or more.                               | Satisfactory.          |
| 2.                            | 2½–4 hours.                                     | Fair.                  |
| 3.                            | ½–2 hours.                                      | Unsatisfactory.        |
| 4.                            | 0.  | Very bad.              |

The following table gives the results of the samples taken during the year :

|                | GRADES |    |    |    | Total |
|----------------|--------|----|----|----|-------|
|                | 1      | 2  | 3  | 4  |       |
| Cold mix. .... | 4      | 17 | 10 | 6  | 37    |
| Hot mix. ....  | 18     | 4  | 15 | 9  | 46    |
| Powders ....   | 2      | 1  | —  | —  | 3     |
| TOTAL ....     | 24     | 22 | 25 | 15 | 86    |

The results show how much improvement still remains to be achieved. And in all this the chief factor is the human element : for the price of safety is unwearying (even at the height of a busy summer season) constant vigilance in maintaining the most scrupulous cleanliness and care.

(e) *Food and Disease.*

The risks arising from the handling of food are considerable and are especially accentuated in a town with so many hotels, restaurants and cafes. Strict personal cleanliness among staff and a high standard of hygienic conditions in the premises must be maintained : and knowing the frailty of human memory and the ease with which good intentions lapse, it is more than ever very essential to reiterate these obvious but often sadly neglected facts.

Efforts have been made to ensure that the cards which impress on those handling food that their first duty is to wash their hands are displayed prominently enough to catch the attention of even the most apathetic or absent-minded worker.

## SECTION F.

# PREVALENCE OF, AND CONTROL OVER, INFECTIOUS AND OTHER DISEASES

## 1. Notifiable Diseases (other than Tuberculosis).

The incidence of infectious disease for the year is given in the subjoined table, which also includes the number of cases admitted to hospital and the number of deaths.

| <i>Disease</i>                          | <i>Total<br/>cases<br/>notified</i> | <i>Cases<br/>admitted<br/>to Hospital</i> | <i>Total<br/>Deaths</i> |
|---|-------------------------------------|---|-------------------------|
| Smallpox ... ..                         | —                                   | —   | —                       |
| Scarlet Fever ... ..                    | 29                                  | 17  | —                       |
| Diphtheria ... ..                       | —                                   | —   | —                       |
| Measles ... ..                          | 297                                 | 30  | 1                       |
| Whooping Cough ... ..                   | 115                                 | 7   | —                       |
| Enteric Fevers ... ..                   | —                                   | —   | —                       |
| Puerperal Pyrexia ... ..                | —                                   | —   | —                       |
| Pneumonia ... ..                        | 11                                  | 5   | —                       |
| Cerebro-Spinal Fever ... ..             | —                                   | —   | —                       |
| Erysipelas ... ..                       | 4                                   | 1   | —                       |
| Ophthalmia Neonatorum ... ..            | 1                                   | 1   | —                       |
| Acute Poliomyelitis ... ..              | 4                                   | 4   | —                       |
| Acute Polioencephalitis ... ..          | —                                   | —   | —                       |
| Encephalitis Lethargica ... ..          | —                                   | —   | —                       |
| Dysentery ... ..                        | —                                   | —   | —                       |
| Malaria (contracted abroad) ... ..      | —                                   | —   | —                       |
| Typhus Fever (contracted abroad) ... .. | —                                   | —   | —                       |

### *Acute Poliomyelitis.*

There was a widespread epidemic of acute poliomyelitis during the second half of the year, reaching the highest recorded incidence in the country as a whole. In Torquay, there were 4 notifications, after final correction, and one of these cases was a non-resident: this incidence was lower than might have been expected, despite the high population at risk with the large number of visitors. None of the cases was connected with any of the others which were widely separated, no connexion was traced between these and any possible source of infection, nor was any missed or abortive case found.

In England and Wales as a whole the corrected notifications of poliomyelitis in 1947 were between 7,500 and 7,600, giving an incidence of about 18 per 100,000 population: the incidence in Torquay was 8 per 100,000 calculated on the resident population only. The year 1938 was the previous highest recorded outbreak for the country with an incidence of 3.8 per 100,000 population.



The mortality in 1938 was 6 per million population (with a case mortality rate of 16 per cent), and in 1947 was provisionally estimated to be about 18 per million population (with a case mortality rate of about 10 per cent). There was no death among the cases in Torquay in 1947.

It is impossible to fit the known facts of poliomyelitis into any theory of the spread and behaviour of the infecting virus: the disease does not conform to our present ideas of epidemiological orthodoxy. Moreover, poliomyelitis appears to be exceptional among infectious diseases in not following the law of age-precession based on naturally acquired immunity. And it would be wiser to admit ignorance than to allow many of the facile explanations and theories which were as widespread as the outbreak.

It is not a "new" disease: indeed Egyptian relics indicate that it is an ancient illness, and from the days of Mephibosheth children have been crippled from unknown causes, often incorrectly attributed to the nurse carelessly dropping the child. In more modern times Sir Walter Scott was a victim at the age of eighteen months in 1773, subsequently the first medical description of the disease under the title "Debility of the lower extremities" was given in 1784 by an English doctor. Later the infectious nature was discovered in the mid-eighties of the last century, and the Scandinavian epidemic of 1,035 cases described by Wickman in 1905, was the first definitely recorded. During the present century epidemics of increasing frequency and extent have occurred, and the analogy to an "incoming tide" is appropriate although the progress is less rhythmical. The outbreaks have usually been of short duration, with a fairly regular curve of incidence, starting in the late summer or autumn, and exhausting themselves before the winter: the 1947 epidemic seems to have been much more prolonged.

At present there is no known definite means of controlling the spread of the disease or of preventing it in the individual; but it is to be hoped that in the evolution of the poliomyelitis virus, the reaction may become less dangerous to the host (man). Creighton in his "History of Epidemics" pointed out the problem of the succession of reigning infections: "In the long period, we have seen much coming and going among the epidemic infections—in some cases a dramatic and abrupt entrance or exit—in other cases a gradual and unperceived substitution." And each new type is somehow suited to the changed conditions. In this country during last century typhus fever declined, typhoid fever rose, then the typhoid group have been virtually eliminated. The seeds of scarlet fever and measles had long existed along with smallpox, but the ascendance of each of the two former diseases had to await events: after which, with the decline of smallpox, measles took



its place, with scarlet fever and diphtheria also ranking as prominent infections. Now diphtheria is being controlled, scarlet fever has lost its former virulence (whether temporarily or permanently is not certain), and the sulphonamide drugs and penicillin have given us the power to control most of the complications of measles and whooping-cough. If history repeats itself it may be that the neurotropic virus diseases are among those on the incoming tide to be the reigning epidemics. And to those who, like Banquo in "Macbeth," ask

"If you can look into the seeds of time  
And say which grain will grow and which will not,"

then it must at present be admitted that only the future, with its inexorable march of events, can reveal the answer.

### *Immunisation.*

For the first time on record there has not been a single case of diphtheria in the Borough during the whole of a year: and while there are no grounds for complacency until the disease is completely eliminated, this is a very encouraging and gratifying reflexion on the diphtheria immunisation scheme. Although this progress is encouraging, it is not enough: diphtheria will occur again and lives will be unnecessarily thrown away because there are still a number of parents who for one reason or another do not take the trouble to get their children protected. And if vaccination and smallpox are any analogy, this group of parents may in the future get larger, as the disease becomes less and less of an immediate danger to childhood.

Diphtheria is a long and tedious illness, requiring many weeks of nursing, and when it is realised what is saved in suffering—apart from the expense—no effort is too great to prevent such a disease and keep the diphtheria wards closed. Last year has shown what can be done, and it now lies with the parents to keep this up and to make full use of the opportunities which medical science has given them.

Diphtheria immunisation has continued to make satisfactory progress, and the organisation detailed in the last annual report remains unchanged.

The following table shows the position at the end of the year :

IMMUNISATION IN RELATION TO CHILD POPULATION.

| <i>Number of Children who had Completed a Full Course of Immunisation at any Time up to 31st December, 1947.</i> |                     |               |               |               |               |                      |                        |                       |
|--|---------------------|---------------|---------------|---------------|---------------|----------------------|------------------------|-----------------------|
| <i>Age at 31.12.47, i.e. Born in Year</i>  | <i>Under 1 1947</i> | <i>1 1946</i> | <i>2 1945</i> | <i>3 1944</i> | <i>4 1943</i> | <i>5-9 1938-1942</i> | <i>10-14 1933-1937</i> | <i>Total under 15</i> |
| <i>Number Immunised</i>  | —                   | 424           | 407           | 462           | 440           | 2381                 | 1983                   | 6097                  |
| <i>Estimated mid-Year Population, 1947 (R.G. Estimate)</i>   | 3420                |               |               |               |               |                      | 5550                   | 8970                  |

DIPHTHERIA NOTIFICATIONS AND DEATHS IN RELATION TO IMMUNISATION.

| NOTIFICATIONS.                      |                                  |   | DEATHS.                      |                          |   |
|-------------------------------------|----------------------------------|---|------------------------------|--------------------------|---|
| <i>Age at Date of Notification.</i> | <i>Number of Cases Notified.</i> | <i>Number of Cases included in preceding Column in which the Child had Completed a Full Course of Immunisation.</i> | <i>Age at Date of Death.</i> | <i>Number of Deaths.</i> | <i>Number of Cases included in preceding Column in which the Child had Completed a Full Course of Immunisation.</i> |
| Under 1                             | —                                | —   | Under 1                      | —                        | —   |
| 1                                   | —                                | —   | 1                            | —                        | —   |
| 2                                   | —                                | —   | 2                            | —                        | —   |
| 3                                   | —                                | —   | 3                            | —                        | —   |
| 4                                   | —                                | —   | 4                            | —                        | —   |
| 5-9                                 | —                                | —   | 5-9                          | —                        | —   |
| 10-14                               | —                                | —   | 10-14                        | —                        | —   |
| <i>Totals</i>                       | —                                | —   | <i>Totals</i>                | —                        | —   |

*Scabies.*

The arrangements for treatment previously outlined have continued, and have proved adequate.

*2. Isolation Hospital Treatment.*

The number of cases admitted to the Isolation Hospital is shown in the following table :

| <i>Cases admitted.</i>  |     |     |     |    |
|-------------------------|-----|-----|-----|----|
| Scarlet Fever           | ... | ... | ... | 19 |
| Diphtheria              | ... | ... | ... | 2  |
| Enteric Fevers          | ... | ... | ... | —  |
| Cerebro-Spinal Fever    | ... | ... | ... | —  |
| Measles                 | ... | ... | ... | 30 |
| Whooping Cough          | ... | ... | ... | 7  |
| Erysipelas              | ... | ... | ... | 1  |
| Chicken-pox             | ... | ... | ... | 4  |
| Rubella                 | ... | ... | ... | —  |
| Mumps                   | ... | ... | ... | —  |
| Encephalitis lethargica | ... | ... | ... | —  |
| Acute poliomyelitis     | ... | ... | ... | 8  |
| For observation         | ... | ... | ... | 14 |
| Other Causes            | ... | ... | ... | 14 |
|                         |     |     |     | 99 |

*3. Tuberculosis.*

*Particulars of any action under the Public Health (Prevention of Tuberculosis) Regulations, 1925 (relating to persons suffering from Pulmonary Tuberculosis employed in the Milk Trade), or under Section 172 of the Public Health Act, 1936 (relating to the compulsory removal to Hospital of persons suffering from Tuberculosis).*

No action was required.

*4. Tuberculosis.*

*New cases and mortality during 1947.*

Particulars of new cases of Tuberculosis and of deaths from the disease in the area during 1947 are given in the following table :

| Age Periods    | NEW CASES   |        |                 |        | DEATHS      |        |                 |        |
|----------------|-------------|--------|-----------------|--------|-------------|--------|-----------------|--------|
|                | Respiratory |        | Non-Respiratory |        | Respiratory |        | Non-Respiratory |        |
|                | Male        | Female | Male            | Female | Male        | Female | Male            | Female |
| Under 1 year   | —           | —      | —               | —      | —           | —      | —               | —      |
| 1 to 5 years   | —           | —      | —               | —      | —           | —      | —               | —      |
| 5 to 15 years  | —           | 2      | —               | —      | —           | —      | —               | —      |
| 15 to 25 years | 3           | 5      | —               | 3      | —           | 1      | —               | 1      |
| 25 to 35 years | 9           | 9      | 1               | 2      | 1           | 2      | —               | —      |
| 35 to 45 years | 4           | 4      | 1               | —      | 1           | 3      | 1               | —      |
| 45 to 55 years | 2           | —      | —               | 1      | 2           | —      | 1               | —      |
| 55 to 65 years | 3           | 1      | 1               | —      | 6           | 2      | —               | —      |
| 65 and over    | —           | 1      | —               | —      | —           | 1      | —               | —      |
| TOTALS         | 21          | 22     | 3               | 6      | 10          | 9      | 2               | 1      |



## SECTION G.

**PORT HEALTH ADMINISTRATION**

This section is published separately.

**MISCELLANEOUS**

## SECTION H.

1. *Government Evacuation Scheme.*

During the year there still remained a small amount of work in connexion with the scheme which is ebbing very slowly to its close. The issuing of billeting orders and the maintenance of the receipt system are still the duty of your Authority, and at the end of the year there were 11 unaccompanied children remaining in this scheme.

Circular 42/47 was received from the Ministry of Health asking that the organisation for the Evacuation Scheme should be wound up so far as special staff is concerned and the section closed by 31st March. This step had been anticipated and had been effected in Torquay by the end of 1945, after which the decreasing amount of work has been adequately dealt with in the general administration of the Department.

UNDERHILL (PLYMOUTH) LTD.

PRINTERS

WORKS: REGENT STREET





